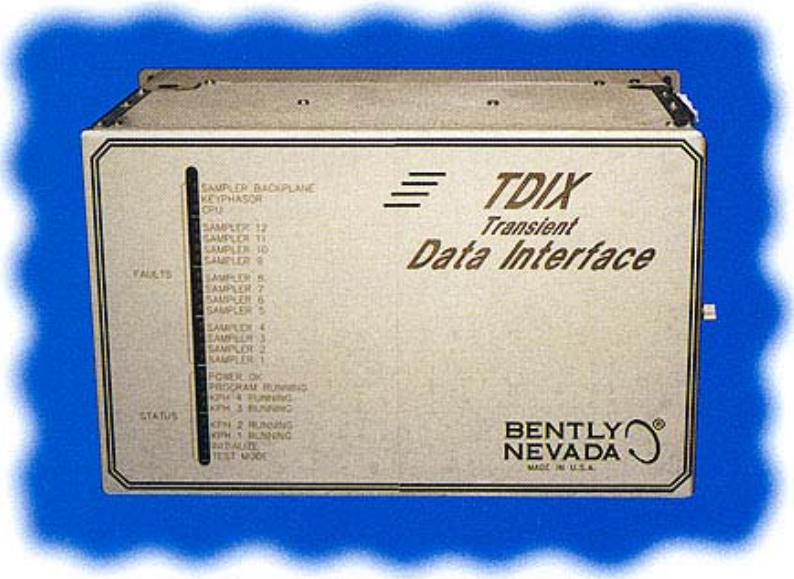
Transient Data Interface External (TDIX):

The next generation in rotating machinery monitoring



Transient data is an essential element in the proper diagnosis of machinery malfunctions. Often, there is little or no warning before a large rotating machine trips. Without sufficient warning, it is impossible to connect portable diagnostic instrumentation to gather transient data.

In 1987, Bently Nevada Corporation helped you solve this problem with the introduction of the Transient Data Manager® (TDM). Using the knowledge gained through customer input and our extensive field experience, we are now proud to introduce the next generation of Transient Data Managers.

Transient Data Interface External (TDIX) is the next generation in on-line transient data collection. Due to advancements in technology, we can now offer a more advanced TDM at a cost equivalent to the original TDM.

Some of the features you will see in the TDIX are:

Dual startup/coastdown buffers - This dual buffer arrangement gives you greater flexibility when collecting startup/coastdown data. You can use one buffer during startups and the second buffer for coastdowns. Or, the first buffer can collect data over the entire rpm range of the transient event, and a second buffer with smaller delta rpms can provide higher density data over a specific range of the transient event.

Independent delta time buffer - Now, you can display Fast Trend data, even during startups/coastdowns.

Improved waveform sampling - The TDIX is constantly sampling waveform data and keeps the most current data in a special memory buffer. When a waveform sample is needed, the TDIX simply transfers the current sample to a long-term buffer. This means faster responses when collecting Dynamic Alarm data.

Collect data for fast startups/coastdowns - Because of the advanced technology used in the TDIX, you can collect transient data for very fast machine startups/coastdowns. The new TDIX can easily capture data for a machine rotor that accelerates from 300 to 3600 rpm in 5 seconds.

Compatible with 3300 and 2201 - TDIX has been designed to take advantage of the advanced digital designs used in the 3300 and 2201 monitoring systems. Even original-design 3300 monitors can be easily upgraded in the field for use with TDIX.

Serial Data Interface (SDI) support built in - All of the functions of the current SDI interface are built into the TDIX. In addition to its normal features, you can now access 1X and 2X amplitude and phase, high resolution gap, and the recently-introduced Not 1X static data through the SDI.

Improved Orbit data - Data used for the Orbit and Waveform plots has been increased to 1024 samples per waveform. In addition, you can choose how the TDIX will sample the data. The possible sampling methods include 128 samples/rev for 8 revolutions, 64 samples/rev for 16 revolutions or 32 samples/rev for 32 revolutions.

Improved Spectrum data - The TDIX will provide a 400 line spectrum to a maximum frequency span of 20 kHz. This data is anti-alias filtered and is available in both steady state and transient operating conditions.

Jumperless hardware - All settings in the TDIX are now provided through an easy-to-use software program. With TDIX, all settings/decisions can be quickly made in the safety and comfort of your office, saved to a file and later downloaded to the TDIX Systems in your plant.

Re-configured automatically - Once configured, the TDIX will store its configuration. Following a power loss, the TDIX will reconfigure itself when power is restored and resume data collection even if the computer's power has ***not*** been restored.

These are only some of the features available in the new TDIX. Units will be available in the second quarter of 1993. Contact your sales representative for a full presentation of this advanced line of Bently Nevada machinery monitoring equipment. ■